## **CLAIMS**

20

- 1. An anchoring element for fixation in a first bone tissue and in a second bone tissue, the first and second bone tissues being separated by non-bone tissue, the anchoring element being elongated and comprising an apex and a first fixation portion disposed at the apex, both adapted for fixation in the first bone tissue, a basis, and a second fixation portion disposed at said basis and adapted for fixation in the second bone tissue, and an intermediate portion positionable in the non-bone tissue separating the first and second bone tissues, **characterized** in that the second fixation portion has the form of a truncated cone having the smaller basis adjacent to the intermediate portion and the larger basis forming the basis of the anchoring element.
- 2. An anchoring element according to claim 1, **characterized** in that the fist bone tissue is located in the os zygomaticum, and the second bone tissue is located in the maxilla.
  - 3. An anchoring element according to claim 2, **characterized** in that an attachment means intended for a denture or a dental bridge is arranged at the basis of the anchoring element.
  - 4. An anchoring element according to any of the previous claims, characterized in that the first fixation portion has the form of a truncated cone having the smaller basis adjacent to the apex and the larger basis adjacent to the intermediate portion.
    - 5. An anchoring element according to any of the previous claims, **characterized** in that the first and second fixation portions and the intermediate portion together have the form of a truncated cone having the smaller basis adjacent to the apex and the larger basis forming the basis of the anchoring element.
    - 6. An anchoring element according to any of the previous claims, characterized in that the first fixation portion is threaded.

WO 2005/079697 PCT/SE2005/000056

7. An anchoring element according to any of the previous claims, **characterized** in that the second fixation portion is threaded.

- 8. An anchoring element according to claim 7, **characterized** in that the second fixation portion comprises at least one recess transverse to the threads and disposed at the intermediate portion, comprising a distinct edge transverse to the threads, which edge provides a groove forming cutting unit.
- 9. An anchoring element according to claim 7 or 8, **characterized** in that the intermediate portion has a smooth outer surface.
- 10. An anchoring element according to claim 9, characterized in that the outer surface of the intermediate portion, the surface limited by the valleys of the threads of the threaded first fixation portion, and the surface limited by the valleys of the threads of the threaded second fixation portion are portions of the envelope surface of the same truncated cone.
  - 11. A dental anchoring member for fixation in the os zygomaticum and in the maxilla, the os zygomaticum and the maxilla being separated by non-bone tissue, the dental anchoring member being elongated and comprising an apex and a first fixation portion disposed at the apex, both adapted for fixation in the os zygomaticum, and a threaded second fixation portion disposed at the basis of the dental anchoring member and adapted for fixation in the maxilla, and an intermediate portion positionable in the non-bone tissue separating the os zygomaticum and the maxilla, an attachment means intended for a denture or a dental bridge being arranged at the basis of the dental anchoring member, characterized in that the second fixation portion comprises at least one recess transverse to the threads and disposed at the intermediate portion, comprising a distinct edge transverse to the threads, which edge provides a groove forming cutting unit.
  - 12. A dental anchoring member according to claim 11, **characterized** in that the second fixation portion has the form of a truncated cone having the smaller basis adjacent to the intermediate portion and the larger basis forming the basis of the dental anchoring member.

- 13. A dental anchoring member according to claim 11 or 12, characterized in that the first fixation portion has the form of a truncated cone having the smaller basis adjacent to the apex and the larger basis adjacent to the intermediate portion.
  - 14. A dental anchoring member according to any of the claims 11 to 13, characterized in that the first and second fixation portions and the intermediate portion together have the form of a truncated cone having the smaller basis adjacent to the apex and the larger basis forming the basis of the dental anchoring member.
  - 15. A dental anchoring member according to any of the claims 11 to 14, characterized in that the first fixation portion is threaded.
  - 16. A dental anchoring member according to claim 15, **characterized** in that the intermediate portion has a smooth outer surface.

- 17. A dental anchoring member according to claim 16, **characterized** in that the outer surface of the intermediate portion, the surface limited by the valleys of the threads of the threaded first fixation portion, and the surface limited by the valleys of the threads of the threaded second fixation portion are portions of the envelope surface of the same truncated cone.
- 18. A dental anchoring unit for fixation in the os zygomaticum, the dental anchoring unit being elongated and comprising an apex and a fixation portion disposed at the apex, both adapted for fixation in the os zygomaticum, a basis, and an end portion disposed between the fixation portion and said basis, the end portion being positionable in non-bone tissue between the os zygomaticum and the original position of the maxilla, and an attachment means intended for a denture or a dental bridge being arranged at the basis of the dental anchoring unit, characterized in that the fixation portion has the form of a truncated cone having the smaller basis adjacent to the apex and the larger basis adjacent to the end portion.

19. A dental anchoring unit according to claim 18, **characterized** in that the attachment means comprises an attachment hole and at least one contact surface for the dental bridge, and that the attachment hole is arranged at an angle to the longitudinal axis of the dental anchoring unit.

5

20. A dental anchoring unit according to claim 18 or 19, **characterized** in that the fixation portion and the end portion together have the form of a truncated cone having the smaller basis adjacent to the apex and the larger basis forming the basis of the dental anchoring unit.

- 21. A dental anchoring unit according to any of the claims 18 to 20, **characterized** in that the fixation portion is threaded.
- 22. A dental anchoring unit according to claim 21, **characterized** in that the end portion has a smooth outer surface.
  - 23. A dental anchoring unit according to claim 22, **characterized** in that the outer surface of the end portion and the surface limited by the valleys of the threads of the threaded fixation portion are portions of the envelope surface of the same truncated cone.